

RESPONSE UNDER 37 C.F.R. § 1.111
U.S. Application No. 09/386,000
Attorney Docket No. Q55595

over Hageman, U.S. Patent No. 2,300,276 (hereinafter "Hageman"), in view of Metzner, U.S. Patent No. 2,904,332 (hereinafter "Metzner").

II. Allowable Subject Matter

Claims 16 and 18 are allowed. Additionally, the Examiner acknowledges that claims 2-4 contain allowable subject matter, but objects to claims 2-4 as being dependent upon a rejected base claim (*i.e.*, claim 1). The Examiner states that claims 2-4 would be allowable if rewritten in independent form including all of the limitations of the base claim. While grateful for the acknowledgement of allowable subject matter, Applicant respectfully requests that the Examiner hold the rewriting requirement in abeyance pending consideration of the following arguments regarding claim 1.

III. Claim Rejections -- 35 U.S.C. § 102(b)

Claims 1, 5, and 6 stand rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Yamada. Applicant traverses the rejection of claims 1, 5, and 6 as follows.

A. Claim 1

Yamada fails to disclose each and every feature recited in claim 1. For example, Yamada fails to disclose "a paper feeding unit including . . . at least one sheet of paper including a stiff carton", as recited in claim 1. The Examiner asserts that Yamada discloses a sheet of carton as element 101 in Fig. 1. However, element 101 describes a roll sheet. There does not appear to be any substantial difference between roll sheet 101 and roll sheet 102 in Fig. 1 of Yamada. Thus, Yamada fails to draw a distinction between the "roll of paper" and the "sheet of paper including a stiff carton", as recited in claim 1.

RESPONSE UNDER 37 C.F.R. § 1.111
U.S. Application No. 09/386,000
Attorney Docket No. Q55595

Furthermore, the roll sheet 101 fails to correspond to the requirement of claim 1 that the sheet of paper include a stiff carton. Characterizing the paper forming roll sheet 101 as "stiff" is contrary to the ordinary meaning of that term.

Even further, Yamada fails to disclose "the paper feeding unit being located at a height that enables a user standing in front of the printer to execute the paper feeding process including replacement of the roll paper and setting the sheet of paper", as recited in claim 1. While Yamada appears to illustrate that a paper feed station 1 is located above a recording station 2, this, in and of itself, is not enough to satisfy the aforementioned height requirement of claim 1. Indeed, the disclosure of Yamada is silent with respect to the paper feed station 1 in relation to a user of the image forming apparatus. Thus, Yamada fails to disclose that a user standing in front of the image forming apparatus could replace the roll paper and set the sheet of paper while standing.

B. Claims 5 and 6

Given the above-identified deficiencies of Yamada with respect to claim 1, claims 5 and 6 are not anticipated by Yamada at least by virtue of their dependency on claim 1.

IV. Claim Rejections -- 35 U.S.C. § 103(a)

A. Claims 13 and 17

Claims 13 and 17 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over McCulley in view of Smedal. Applicant traverses the rejection of claims 13 and 17 as follows.

The Examiner acknowledges that McCulley fails to teach or suggest "a sheet feeding area positioned at a height whereat a user, who is approximately 170 cm tall, can set up a printing medium without having to bend substantially at the waist when the user is standing erect in front of the printer and standing substantially at ground level", as recited in claim 13. However, the Examiner asserts that Smedal makes up for this deficiency of McCulley. The Examiner asserts that Smedal discloses a roll attachment for typewriters that includes a frame 5 with a vertical leg 3 adapted to be supported at any elevation, including the height recited in claim 13. *See* page 1, lines 85-90 of Smedal. However, Smedal describes a frame with a vertical leg adapted to be supported at any desired elevation within the post 2. *See, e.g.*, page 1, lines 85-89 of Smedal. Thus, the elevation allowed by the attachment of Smedal is limited by the size (height) of the post 2. *See, e.g.*, Fig. 1 of Smedal. Smedal fails to teach or suggest that the post 2 is of a size sufficient to allow the attachment to be positioned at a height whereat a user can set up a printing medium without having to bend substantially at the waist when the user is standing erect in front of the printer and standing substantially at ground level. Indeed, given the nature of typewriters, it is not clear why a user would be standing to set up the printing medium. Unlike for large printers (*see, e.g.*, claim 13), the printing medium for typewriters is usually not bulky or heavy.

Furthermore, the attachment of Smedal relied on by the Examiner for describing the sheet feeding area of a large printer is actually a device separate/distinct from the typewriter. *See, e.g.*, page 2, lines 55-58 of Smedal. Thus, the attachment of Smedal relied on by the Examiner fails to teach or suggest a sheet feeding area of a large printer.

RESPONSE UNDER 37 C.F.R. § 1.111
U.S. Application No. 09/386,000
Attorney Docket No. Q55595

Furthermore, McCulley and Smedal represent non-analogous art in that they both relate to typewriters, which are not large printers, as recited in claims 13 and 17. Typewriters do not generally suffer from the problems encountered by large printers. For example, typewriters would not require a deeper installation space for replacing a paper roll or require that a user replace a heavy roll of paper. *See, e.g.*, Applicant's page 1, line 1 to page 2, line 19. Therefore, to the extent that McCulley and/or Smedal represent non-analogous art, the rejection of claims 13 and 17 under § 103(a) is improper.

Additionally, based on the above rationale, the Examiner has failed to provide a reasonable motivation for combining the teachings of McCulley and Smedal in rejecting claims 13 and 17. The Examiner asserts that "it would have been obvious to a person of ordinary skill in the art at the time of the applicant's invention to modify McCulley by utilizing a frame with a vertical leg adapted to be supported at any elevation, including a height at which a user, who is approximately 170 cm tall, can set up a printing medium without having to bend substantially at the waist when the user is standing erect in front of the printer and standing substantially at ground level, when the printer is placed substantially at ground level, for the purpose of adapting the attachment to any type [of] writing machine".

However, as the Federal Circuit recently reminded us, the USPTO is held to a *rigorous* standard when trying to show that an invention would have been obvious in view of the combination of two or more references. *See, In re Sang Su Lee*, 2002 U.S. App. LEXIS 855, *10 (Fed. Cir. 2002), *citing, e.g., In re Dembiczak*, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999) ("Our case law makes clear that the best defense against the subtle but powerful

RESPONSE UNDER 37 C.F.R. § 1.111
U.S. Application No. 09/386,000
Attorney Docket No. Q55595

attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references.”). The Federal Circuit goes on to emphasize that the “need for specificity pervades this authority.” *In re Sang Su Lee* at *10-*11 (emphasis added) (citing *In re Kotzab*, 217 F.3d 1365, 1371, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000) (“particular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed”))).

The current grounds of rejection fails to satisfy this standard for demonstrating that the claimed invention would have been obvious in view of the combination of McCulley and Smedal.

Specifically, Smedal describes attachments for typewriters. *See, e.g.*, claims 1-12 of Smedal. The Examiner has failed to explain why one of ordinary skill in that art would have been motivated to modify the post 2 such that it is sufficiently long to extend the roll of paper 27 to a height sufficient to allow a user to set up the printing medium without having to bend substantially at the waist while standing erect in front of the typewriter. Indeed, absent impermissible hindsight on the part of the Examiner, there does not appear to be any suggestion or motivation in the references for modifying Smedal in this manner. Furthermore, such a modification would not even appear to work in the context of a large printer. As discussed above, the rolls of paper for a large printer are often very heavy, such that the structure described in Smedal would not appear adequate for supporting such a heavy roll of paper. Additionally, because Smedal describes an attachment for typewriters, it teaches away from the requirement of

RESPONSE UNDER 37 C.F.R. § 1.111
U.S. Application No. 09/386,000
Attorney Docket No. Q55595

claim 13 that "the sheet feeding area is positioned at the height when the printer is placed substantially at the ground level". Typewriters, by their very nature, are designed to not be placed substantially at the ground level.

For at least the above exemplary reasons, the Examiner has failed to provide any reasonable suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings, such that the invention of claims 13 and 17 is rendered obvious.

Thus, claims 13 and 17 are patentable for at least the above exemplary reasons. Furthermore, claim 17 is also patentable by virtue of its dependency from claim 13.

B. Claim 15

Claim 15 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Hageman in view of Metzner. Applicant traverses the rejection of claim 15 as follows.

Hageman fails to teach or suggest "a cover member, which covers a first feeding path for the roll of paper from above", as recited in claim 15. The Examiner asserts that Hageman discloses two cover members 45 and 42. *See, e.g.*, Fig. 4 of Hageman. Hageman describes a housing/spool 45 surrounding a carbon supply roll 46, and a separate guide plate 42. *See, e.g.*, Fig. 4 of Hageman. However, neither housing 45 nor guide plate 42, either alone or in combination, "covers a first feeding path for the roll of paper from above". Indeed, both a record strip S and a carbon strip C follow a feeding path (above support rail 48) which is uncovered. *See, e.g.*, Fig. 4 of Hageman.

Furthermore, the Examiner acknowledges that Hageman fails to teach or suggest that "the cover member extends linearly from a upstream portion thereof to a downstream portion thereof

in connection with a direction in which the sheet of paper is fed" or that "the cover member is disposed between the sheet of paper and the roll of paper at a location in the sheet feeding area at which the roll of paper is in a rolled shape", as recited in claim 15. However, the Examiner asserts that Metzner makes up for these deficiencies of Hageman.

The Examiner states that Metzner describes a cover member 23 that extends linearly from an upstream portion to a downstream portion in which a sheet of paper is fed and that the cover member is disposed between a sheet of paper and a feed pack at a location in the feed pack area for the purpose of continuously supporting the paper from the pack to the printing area. Metzner describes separating a record strip material 14 into its component parts, each of which is directed into a separate chute defined by downwardly and rearwardly inclining deflector guides 22 and 23. *See, e.g.*, Fig. 1 of Metzner. However, Metzner fails to make up for the deficiencies of Hageman for at least the following illustrative reasons.

First, Metzner fails to teach or suggest a cover member provided in the sheet feeding area, as recited in claim 15. Instead, the deflector guides 23 of Metzner relied on by the Examiner are for discharging papers on which printing has been performed. *See, e.g.*, Fig. 1 of Metzner.

Second, Metzner fails to teach or suggest that "the cover member extends linearly from a upstream portion thereof to a downstream portion thereof in connection with a direction in which the sheet of paper is fed", as recited in claim 15. Metzner fails to teach or suggest a cover member. The deflector guides 23 relied on by the Examiner are for guiding the component parts of the record strip material 14 (after recording) into the appropriate chutes. *See, e.g.*, Fig. 1 of

RESPONSE UNDER 37 C.F.R. § 1.111
U.S. Application No. 09/386,000
Attorney Docket No. Q55595

Metzner. Furthermore, Metzner describes feeding a pack of series connected record forms 13 (supported by a shelf 12) into a recording machine 11. *See, e.g.*, Fig. 1 of Metzner. However, the deflector guides 22 and 23 extend from an upstream portion to a downstream portion in a direction opposite to the direction in which the sheet of paper is fed. *See, e.g.*, Fig. 1 of Metzner.

Third, Metzner fails to teach or suggest that "the cover member is disposed between the sheet of paper and the roll of paper at a location in the sheet feeding area at which the roll of paper is in a rolled shape" (emphasis added). The Examiner asserts that Metzner discloses a cover member that is disposed between a sheet of paper and a feed pack at a location in the feed pack area for the purpose of continuously supporting the paper from the pack to the printing area. However, even assuming *arguendo* that the Examiner's assertion is correct, Metzner still fails to teach or suggest the claimed invention. Metzner describes a pack of series connected record forms 13 and not a roll of paper. Indeed, the use of these series connected forms appears to facilitate the collection of used record strip elements R on depressed portions 24 against uprights 25, whereas previously rolled paper would be difficult (at best) to collect in this manner. *See, e.g.*, Fig. 1 of Metzner.

Thus, claim 15 is patentable for at least the above exemplary reasons.

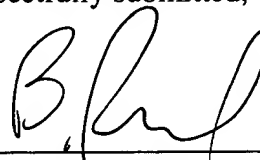
V. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned attorney at the telephone number listed below.

RESPONSE UNDER 37 C.F.R. § 1.111
U.S. Application No. 09/386,000
Attorney Docket No. Q55595

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "B. Raulerson", written over a horizontal line.

Billy Carter Raulerson
Registration No. 52,156

SUGHRUE MION, PLLC
2100 Pennsylvania Avenue, N.W.
Washington, D.C. 20037-3213
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

Date: November 13, 2002